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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,561	06/29/2001	Edward J. Kroliczek	2288-022	7910

7590 12/05/2003  
Roberts Abokhair & Mardula, LLC  
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Reston, VA 20191

EXAMINER

PATEL, NIHIR B

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/896,561

Applicant(s)

KROLICZEK ET AL.

Examiner

Nihir Patel

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on June 30<sup>th</sup>, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 and 9-28 is/are allowed.
- 6) ☒ Claim(s) 7 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see paper number 8, filed on June 30<sup>th</sup>, 2003, with respect to the objection of the specification for not stating how the heat sink is connected to the condenser have been fully considered and are persuasive. The objection of the specification has been withdrawn.
2. Applicant's argument, see paper number 8, filed on June 30<sup>th</sup>, 2003, with respect to the objection of the drawings alleging that the drawings must show heat sinks have been fully considered and are persuasive. Since the applicant has deleted all references to heat sink in the claims, the objection of the drawings has been withdrawn.
3. Applicant's arguments, see paper number 8, filed on June 30<sup>th</sup>, 2003, with respect to the objection of the drawings have been fully considered and are persuasive. Since the applicant has amended figures 1 through 7 to include the legend BACKGROUND ART, the objection to the drawings has been withdrawn.
4. Applicant's arguments filed on June 30<sup>th</sup>, 2003 have been fully considered but they are not persuasive. The applicant argues that the only liquid transportation mechanism within the core of the evaporator in Van Oost is through the capillary wick. The examiner disagrees. Van Oost clearly states that the link between the reservoir 1 and the evaporator 2 is enabled by means of a conduit 3, which comprises a first part 18, formed by a capillary link, and a second part 4 formed by an axial channel (see figures 1 and 3a through 3c; column 4 lines 5-10). Therefore claim 7 is still rejected under 35 U.S.C. §102(e) anticipated by Van Oost 5,944,092 from the previous office action.

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5. Applicant's arguments, see paper number 8, filed on June 30<sup>th</sup>, 2003, with respect to rejection of claim 1 under 35 U.S.C. §103(a) have been fully considered and are persuasive. The rejection of claim 1 has been withdrawn.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter ("void of a wick") which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Van Oost US

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Referring to claim 7, Van Oost discloses a capillary pumped heat transfer loop that comprises a primary wick 5 (see figure 1) defining a core (see figure 1); a vapor channel 6 (see figure 1) configured to receive vapor exiting the primary wick 5 (see figure 1); a liquid channel 4 (see figure 1) within the core that is configured to receive liquid from an external source 1 (see figure 1) to the evaporator 2 (see figure 1), at least a portion of the liquid channel is void of a wick (see figure 8); a secondary wick 18 (see figure 1) providing a flow path within the liquid channel of the core (see figure 8).

Referring to claim 8, Van Oost discloses an apparatus wherein the secondary wick is configured to separate liquid and vapor within the core.

***Allowable Subject Matter***

1. Claims 1-4 and 9-28 are allowed.

***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Nihir Patel whose telephone number is (703) 306-3463. The examiner can normally be reached on Monday-Friday from 7:30am to 4:30pm. If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor Henry Bennett can be reached at (703) 308-0101.

NP  
September 16, 2003

Henry Bennett  
Supervisory Patent Examiner  
Group 8700